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## Allow Road Users to Bypass Malfunctioning Signals

## **Action**

Michigan bicyclists ask the Michigan Legislature to:

- Support HB 5848 and allow cyclists to safely and legally proceed through malfunctioning traffic signals
- Expand the proposed legislation to include a provision to allow automobiles to also proceed through non-functioning or malfunctioning traffic signals
- Amend language referring to "automated stoplights" to read "actuated signals" to fully encompass the various styles of traffic signals in use across the state.

## <u>Issue</u>

Many Michigan intersections use induction loop systems to actuate automated traffic signals. Most induction loop systems rely on coils of wire placed under the roadway surface. Passing an electrical current through those coils creates a magnetic field. When a large metallic object comes to rest above the coils, the magnetic field is disturbed. Upon registering the disturbance, the system changes the traffic signal.

Induction loop configurations are often poorly configured for bicycles. Such systems rely on metal from a vehicle being close enough to the coil to disturb the magnetic field. A bicycle in the middle of the loop may be too far from any of the wires to trip the sensor. Even if a cyclist is lucky enough to be positioned properly, modern carbon fiber and other high-tech polymer bicycles may not contain enough metal to disturb the magnetic field. And of course, even a perfectly configured loop system may malfunction. Other styles of actuated signals can also malfunction and not detect bicyclists and other roadway users.

This leaves cyclists in an uncomfortable position: (1) sit at the intersection indefinitely, or (2) proceed through and risk being cited for a civil infraction. Vehicles behind the cyclist are also trapped at the intersection. Recognizing this, many law enforcement officers already forego ticketing cyclists due to a malfunctioning traffic signal (so long as it was otherwise safe to do so).

A few solutions are possible: (1) retrofit existing induction loops by changing coil configuration and/or sensor sensitivity, (2) install signs and road stencils indicating where cyclists must stop to trip the sensor, and/or (3) change Michigan law, allowing cyclists to legally proceed through malfunctioning lights when it is safe to do so. Since an otherwise well-engineered system can still completely malfunction, we advocate a combination of all three approaches and urge local governments to take appropriate actions to adjust and modify signals to accommodate bicyclists.

HB 5848 attempts to solve this issue by allowing bicycles, motorcycles, or mopeds to proceed through a red traffic signal if "after 1 full cycle of the automated stoplight after making the stop, or after 60 seconds if the automated stoplight is not cycling or the driver is unable to determine whether the automated stoplight is cycling, the automated stoplight fails to detect the presence of the bicycle..." If a cyclist is ticketed for proceeding through a red light, the amendment places the burden on the citing law enforcement officer to testify that the light was cycling properly, or the cyclist failed to wait 60 seconds.

We recognize that non-functioning traffic signals also affect motorists and therefore advocate modifying HB 5848 to allow all road users, including automobiles to proceed through non-functioning traffic signals.